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Report Documentation Page

Form Approved OMB No. 0704-0188 What if a Combatant Command gave the Army SCA because of the nature of the operation? I believe Army Space Professionals need to be mentally prepared to lead the effort.

hanging the mindset," responded Rear Admiral Sandy Daniels during an interview following her presentation at the 2010 Space Cadre Symposium in Colorado Springs, Colo., this past August. The theme in her comments to Army space professionals at the symposium and during the Army Space Journal interview was the joint nature of the military space business. Daniels is the deputy commander of U.S. Strategic Command's Joint Functional Component Command for Space.

The question that led to her comment about mindsets: What is your specific challenge that you have to the Army space professional in regard to joint Space Coordinating Authority (SCA)?

"Army space professionals, and all space professionals regardless of service, need to recognize that the overall fight is a joint effort and the SCA is there to support that effort. There is a standard thought that the Air Force will be the lead in coordinating space assets and requirements," she said. "Some of the doctrinal history supports that because the Air Force has the preponderance of space capability and the preponderance of space people. But I suggest that people need to look at SCA through the operational lens vice the service

perspective. A theater command that may be planning a maritime or land fight may want to consider either appointing a different Service component lead or certainly making sure that they integrate across the Services to bring a joint perspective to the fight."

"So the specific challenge to the Army space professional is this: What if a Combatant Command gave the Army SCA because of the nature of the operation? I believe Army Space Professionals need to be mentally prepared to lead the effort. I also think they need to realize the need to stay connected with all of the space experts including the Air Force and Navy that might be in theater."

The follow-up question sparked her deeper response: What is the particular challenge to Space Support Elements and Army Space Support Teams in executing SCA tasks? "I think part of it is just that mental shift of the team members saying to themselves 'we can do this, we are not a second tier.' In reality, there is no tier intended in the structure at all. Yet I think there is a perception of it. What we're really talking about is doing the SCA task in such a way that it's a collaborative approach within the theater regardless of who has SCA and everyone involved being prepared to know where to reach back to regardless of service."

INATING AUTHORITY

BY MICHAEL L. HOWARD, ASJ EDITOR-IN-CHIEF

Deputy Commander, Joint Functional Component Command - Space, Rear Admiral Sandy Daniels serves as one of the keynote speakers at the 2010 Army Space Cadre Symposium in Colorado Springs, Colo. *Photos by Sharon L. Hartman*

The remainder of the questions-and-answers from the 30-minute discussion follow.

My first question is what specifically does it mean that space is inherently "joint" in the military context?

DANIELS Well, I think joint is a two-fold concept when you look at the user perspective. There are many space users: All of the military services use space, some in similar ways and some in different ways. That means that all of the joint requirements need to be accounted for while each service brings something unique to the table when either creating those capabilities or in how they creatively use what's up there. So, we learn a lot from each other as we try to solve service-unique problems in a joint environment.

Following up on that, how does the unique history that military services each independently possess in space beginnings contribute to this joint characteristic?

DANIELS Our history in the beginning of the space age points to each service having sometimes similar and sometimes unique problems to solve. What are the operational issues that the Army would have that might be different than, say, the Air Force or Navy? I know the Navy the best, so I can talk to that a little bit. Distributing command and control: You know, you're onboard ships so you're naturally very focused on communication and navigation. One challenge we had in the past was the question of how to launch a missile from a submarine. That led to Transit, the first space-based navigation system. Likewise, the Army's perspective is going to be different because you have much smaller units and different issues, so the user equipment requirements are going to be different than, say, a larger ground-based organization that would be centrally located.

It's interesting that you talk about this because I noticed listening to this argument over the last ten years or so, people have a tendency of coming into the discussion from their own service-unique perspective as opposed to looking at it from this broader perspective. So how is it – understanding what you just said – how is this perspective of being joint important to take us to the future challenges in space?

DANIELS I think it should point to people recognizing how we need to collaborate increasingly from both the operational perspective as well as that of developing the

space systems. Now yes, we have a joint requirement process in place for space systems, but things don't stop at the requirements process as the system evolves, trades are made, and schedules, technology and budgets change. So that we don't lose a perspective and miss something critical, we need to make sure that all of the key voices are still participating as space systems are developed and fielded.

There are also the interagency and commercial aspects of the discussion. How do these various stakeholders impact the overall environment that the military space professional must operate within?

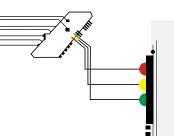
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DANIELS First, there's recognition that all space is not Department of Defense as you pointed out. It includes the national intelligence community, interagency, and the commercial aspect. At JFCC Space, one of the ways we address that is we have a very close working relationship with the National Reconnaissance Office. The other JFCC Space deputy commander is Brig Gen Cary Chun, the Director of Mission Operations at the National Reconnaissance Office. The relationship between us and the National Reconnaissance continues to grow closer as we try to do our duties as far as those capabilities.

We also have liaisons from National Geospatial Intelligence Agency, from National Security Agency, and from National Air and Space Intelligence Center. These liaisons are involved in almost all aspects of our operations and the relationships help us link into those intelligence communities. As far as remote sensing the linkage is through National Geospatial Intelligence Agency, while we coordinate commercial SATCOM issues with the Global SATCOM Support Center. Ultimately, we're always looking to improve our relationships as we recognize that there's probably still work to be done.

And then when you tie that into the Army FA40 or the Navy Space Cadre member that is out in the field the relationship with the JFCC Space and our Joint Space Operations Center is very important.

The Joint Space Operations Center leads videoteleconferences with the different theater SCA and Director of Space Forces but others certainly participate, so that our operators and liaisons have forum to talk to the space experts in each Combatant Command.



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When you talk about command and control aspects in SCA, is there some relationship between those?

DANIELS Just to clarify, SCA speaks to the overall coordinating authority so they don't have command and control of anything. U.S. Strategic Command has the command and control authority of the key space assets, and so our job is to support the theater by exercising our command and control. The SCA in theater coordinates what they need, for example: "I think I need a couple more Globla Positioning System products. I need Overhead Persistent Infrared focused on X event. I need these other capabilities." That's where we at JFCC Space come in and direct the tactical space squadrons to provide effects on their behalf. We want the Combatant Commands to tell us the effect they need and we will work with them to properly deliver what is needed.

In your last chart you had your challenges. Can you explain the Joint nature of the Space Control Authority?

DANIELS If you look at the JP 3-14, that's where it lays it initially out. Commander JFCC Space is the global Space Coordinating Authority for Commander, U.S. Strategic Command. So looking at it from that level, each Combatant Command can designate whomever it needs within its theater to have SCA for the theater. SCA could be retained at the Joint Force Commander level, but the idea of that responsibility is to coordinate space effects no matter where that capability is from and how to apply it. We at JFCC Space execute our SCA from a global perspective and the Geographical Combatant Commanders execute it from a theater-level perspective. We also coordinate space effects with other functional Combatant Commands.

But you make a particular point to stress the challenge of recognizing the jointness of SCA.

DANIELS The point I try to make is that no matter which service component is designated SCA, the Combatant Commander has the lead responsibility. The Combatant Commander is better off to recognize all of the space experts within its area so that they can properly leverage it for the joint fight. So, if SCA is designated to the Joint Force Air

Component Command's Commander, the Director of Space Forces then is going to help the commander execute SCA by reaching out to the Army Space Suport Elements, or if there's a Navy element and Marine Corps element, just like the Joint Force Air Component Command coordinates across services for air operations.

What do you think are the particular challenges to shifting this mindset about SCA?

DANIELS Again, it is the need to change from looking at who brings the most space stuff to what fits the operation itself. And so the nature of the operation may require primacy of Army-specific kinds of knowledge, perhaps looking at it from that operational perspective, maybe there's a need for an Army space leader in this to ensure that what we get is tailored to the operation. It's not necessarily about the most stuff, but the operation itself dictates the approach.

What advice do you have for Army space cadre members in developing strategic thinking skills that will help them to be able to think as you said simultaneously tactical, operational and strategic levels in this complex space and operational environment?

DANIELS I think part of it is making sure you broaden your particular education and training. So, it's one thing to learn the particular system or the equipment that you have to work, but then you start learning more about space effects at the operational level of war. The other is trying to get into the head of your next level up of leadership. You may do a particular job and know how to do it well, but how well do you understand and anticipate the question that the decision-maker, whatever that next level up is, is going to ask. And by anticipating their decision-making needs, you can get ahead of the curve and make sure you provide that information or start thinking about where would you get that from or who would you collaborate with.

Talking about command and control relationships, how does JFCC Space ensure that space-based capabilities, under its operational/tactical control are tactically/operationally responsive to the needs of Army ground commanders?

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DANIELS We often start with a theater request from the Combatant Commanders, although we also have a continued dialogue with each theater to understand their needs. We fold those requirements into what we call the Joint Space Tasking Order, which is the mechanism we use to command and control the systems and capabilities under our operational control. The Joint Space Tasking Order is the tasking component of our larger three week cycle to plan, task, and assess the effects we provide. For example, if there is an upcoming launch at the same time we are supporting a particular operation in a given theater, our tasking cycle displays those competing priorities for limited assets and allows Commander, JFCC Space to allocate the right resources to meet the requirements. The process allows us to understand when to allow system maintenance or gives us insight to refocus capabilities based on changing priorities. These changing priorities could derive from an Army, Navy, Air Force or Marine commander.

My last question I want to talk about has to do with the National Space Policy. The new policy has pretty strong language about transparency and partnerships. What kind of efforts are going on at JFCC Space to progress this concept?

DANIELS We need to make sure everybody realizes that U.S. Strategic Command headquarters works with the Joint Staff and Office of the Secretary of Defense) on this effort. Since JFCC Space is an operational entity, that's something we collaborate with the Office of the Secretary of Defense J5 and J3 through the staff at U.S. Strategic Command. One of the areas that preceded the policy but the policy opens up for more advancement on is what we call Space Situational Awareness sharing. Prior to the Iridium-Cosmos collision, our responsibility in JFCC Space was to focus on the Department of Defense/U.S. government systems for collision avoidance. We now assess all known space objects against those that are operational, working with the owners and operators, to provide safety of flight and preventing collisions. In doing this, we're in the process of exploring where do we take all of it as far as expanding collaboration and cooperation internationally. U.S. Strategic Command, of course, has lead for this and, as I mentioned, they work closely with the Joint Staff and Office of the Secretary of Defense.







Left - Attendees take notes and listen to a presentation at the 2010 Army Space Cadre Symposium; Above - LTC J. Dave Price, commander, 1st Space Battalion reacts to information being presented; Below - Charles Anderson from Johns Hopkins University Applied Physics Laboratory gives a presentation. *Photos by Sharon L. Hartman*

